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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dan Kikinis

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EXAMINER

VAN HANDEL, MICHAEL P

ART UNIT

PAPER NUMBER

2424

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/854,339	Applicant(s) KIKINIS ET AL.	
	Examiner MICHAEL VAN HANDEL	Art Unit 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 8, 9, 12-14, 16, 19, 20, 23-25, 27, 30, 31 and 35-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8, 9, 12-14, 16, 19, 20, 23-25, 27, 30, 31, 35-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/20/2010 has been entered.

Response to Amendment

2. This action is responsive to an Amendment filed 4/20/2010. Claims **1-3, 5, 8, 9, 12-14, 16, 19, 20, 23-25, 27, 30, 31, 35-52** are pending. Claims **1, 2, 5, 8, 9, 12, 14, 19, 20, 23, 24, 30, 31, 35-41** are amended. Claims **4, 6, 7, 10, 11, 15, 17, 18, 21, 22, 26, 28, 29, 32-34** are canceled. Claims **48-52** are new.

Response to Arguments

3. Applicant's arguments regarding claims **1, 5, 8, 12, 16, 19, 23, 27, 31, 36, 37, 39, 40, 43,** and **45-48**, filed 4/20/2010, have been fully considered, but they are not persuasive.

Regarding claims **1, 12,** and **23**, the applicant argues that Hoarty fails to teach or suggest a database including a plurality of 3-D EPG worlds. The examiner respectfully disagrees. The applicant specifically argues that Figures 35-41 of Hoarty merely illustrate a plurality of views for a menu system providing interactivity for a user. Hoarty discloses an interactive information

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system (col. 18, l. 49-50 & Figs. 35-41). Hoarty discloses that the interactive information system has a plurality of different views (Figs. 33-41). Figure 33 illustrates a view for TV listings, Figure 34 illustrates a view for classified advertisements, Figure 35 illustrates a different view for classified advertisements within a carousel menu system, Figure 36 illustrates a program listing grid view, Figures 37-39 illustrate views for finding programs by subject, show, or actor, and Figures 40 and 41 illustrate views for a particular program (Figs. 33-41). The examiner interprets each of these views to be a different 3-D EPG world, as currently claimed. Although Applicant argues that these views are not worlds, the examiner fails to find any language in the claims distinguishing “worlds” from the views of Figs. 33-41. Hoarty further discloses that the interactive information services are provided from a headend (col. 2, l. 29-31). As such, the examiner interprets this as a database, as currently claimed.

Further regarding claims **1**, **12**, and **23**, the applicant argues that Hoarty fails to teach or suggest determining an assignment to the 3-D EPG of a 3-D EPG world of the plurality of 3-D EPG worlds, wherein the assignment is customizable. The examiner respectfully disagrees. The applicant specifically argues that Hoarty describes an EPG with hard-programmed displays and that therefore, any assignment cannot be customized. Hoarty discloses that the user navigates between the views of Figs. 33-41 through user interaction (col. 18, l. 49-65). For example, when a classified advertisements interactive service is selected, Figures 34 or 35 are displayed. Within the carousel, a user can rotate the carousel with a cursor to get to a different view, such as in Figure 37. A user may select a menu choice of interest by pushing a button on a remote unit (col. 19, l. 1-18). Figure 36 shows a 3-D display of a television program grid that is displayed upon user selection for the TV listings (col. 19, l. 19-28). A user can also select to find programs

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and movies by subject, show, or actor, resulting in displays illustrated in Figures 37-39 (col. 19, l. 29-39). If a user selects a particular program, a listing and choices can be displayed, such as illustrated in Figures 40 or 41 (col. 19, l. 39-45). The examiner notes that each of the 3-D views displayed to the user is displayed based on user selection. As such, the examiner maintains that the assignment of the 3-D EPG world is customizable, as currently claimed.

Regarding claims **5**, **16**, and **27**, the applicant argues that Hoarty does not disclose a database including at least one of a program event, program schedule time, program channel identification, and program title. The examiner respectfully disagrees. As noted above, Hoarty discloses that a headend provides interactive information services. One of these services is a television program guide, which displays programs, program times, program channels, and program titles (Fig. 36).

The examiner respectfully disagrees with Applicant's arguments regarding claims **8**, **19**, **31**, **36**, **37**, **39**, and **40**, for the reasons stated above with respect to claims 1, 12, and 23.

Regarding claims **43**, **47**, and **48**, the applicant argues that Hoarty does not disclose that the database includes localized interactive content, and that the first unit is configured to generate the 3-D EPG based on the localized interactive content. The examiner respectfully disagrees. As noted above, Hoarty discloses a headend providing interactive information services. Since the headend is connected to a plurality of subscribers, the examiner interprets this as interactive information services "localized" for those subscribers. For example, Hoarty discloses that the headend provides a local origination service, community event service, etc. (col. 5, l. 30-32).

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Regarding claim **45**, the applicant argues that Hoarty does not disclose that the database is configured to store localized interactive content in real-time. The examiner respectfully disagrees. As noted above, Hoarty discloses that the headend stores and provides interactive information services. Hoarty discloses providing those services over virtual channels (col. 8, l. 40-49). Since the services are stored at the headend when they are provided, the examiner interprets this as storing the localized interactive content in real-time, as currently claimed.

Regarding claim **46**, the applicant argues that Hoarty does not disclose that the database further includes electronic commerce objects and that the first unit is configured to generate the 3-D EPG based on electronic commerce objects. The examiner respectfully disagrees. Hoarty discloses that the interactive information service provides classified advertisements (Fig. 35).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims **23-25, 27, 30, 31, 48** are rejected under 35 U.S.C. 101, because the claimed invention is directed to non-statutory subject matter.

Claim **23** is rejected under 35 U.S.C. 101, because the claimed invention is directed to non-statutory subject matter. Claim 23 is directed to a machine-readable storage medium; however, Applicant's specification states that the term "machine-readable medium" may include electrical, optical, acoustical, and other forms of propagated signals (e.g., carrier waves, infrared signals, digital signals, etc.)(paragraph 46 of Applicant's specification). The examiner notes that a claim directed to a signal or law of nature *per se* does not appear to be a process, machine,

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manufacture, or composition of matter. The examiner recommends that the claim be amended to be directed to a “non-transitory machine-readable storage medium.” See **MPEP 2106.01** for guidance.

Claims **24, 25, 27, 30, 31, and 48** are rejected as being dependent on claim 23.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims **1-3, 5, 8, 9, 12-14, 16, 19, 20, 23-25, 27, 30, 31, 36, 37, 39-48, 50-52** are rejected under 35 U.S.C. 102(b) as being anticipated by Hoarty (of record).

Referring to claims **1, 12, and 23**, Hoarty discloses a system/computer-implemented method/machine-readable storage medium, comprising:

- a first unit (set top 13)(col. 5, l. 46-62 & Fig. 1) configured to generate an interactive three-dimensional (3-D) electronic programming guide (EPG), the 3-D EPG including a presentation of a virtual world having programming information and a layout (col. 19, l. 19-27 & Fig. 36);
- a database including a plurality of 3-D EPG worlds (Figs. 35-41), each 3-D EPG world includes a virtual world layout that provides the layout of the presented virtual world and each 3-D EPG world is assignable to the 3-D EPG (Figs. 35-41), wherein the first unit is further configured to determine an assignment to the 3-D EPG world

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of the plurality of 3-D EPG worlds, wherein the assignment is customizable, select the 3-D EPG world based on the assignment, and modify the layout of the presented virtual world based on the virtual world layout of the 3-D EPG world (the user can navigate to different information services through the carousel display. The examiner interprets the carousel display and the information services menus, such as the program grid of Figure 36 to be 3-D EPG worlds)(Figs. 35-41).

Referring to claims **2**, **14**, and **24**, Hoarty discloses the system/computer-implemented method/machine-readable storage medium of claims 1, 13, and 23, respectively, wherein the system comprises at least one of a set-top box (col. 5, l. 50 & Fig. 1), a television (col. 8, l. 67 & col. 9, l. 1), and a VCR (col. 17, l. 11).

NOTE: The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claims **3** and **25**, Hoarty discloses the system/machine-readable storage medium of claims 1 and 24, respectively, wherein the system includes a plurality of drivers, one of the drivers communicating with a separate unit to replenish programming information (col. 5, l. 46-62).

Referring to claims **5**, **16**, and **27**, Hoarty discloses the system/computer-implemented method/machine-readable storage medium of claims 1, 12, and 23, respectively, wherein the database further includes at least one of a program event (Fig. 36), program schedule times (Fig. 36), program channel identification (Fig. 36), and program title (Fig. 36).

NOTE: The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

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Referring to claims **8**, **19**, and **31**, Hoarty discloses the system/computer-implemented method/machine-readable storage medium of claims 1, 12, and 30, respectively, wherein the assignment is determined based on a user selection (col. 18, l. 63-67 & col. 19, l. 1-27).

Referring to claims **9**, **20**, and **30**, Hoarty discloses the system/computer-implemented method/machine-readable storage medium of claims 1, 12, and 23, respectively, wherein the virtual world layout of the 3-D EPG world is a matrix of rectangular boxes (Fig. 36).

Referring to claim **13**, Hoarty discloses the computer-implemented method of claim 12, wherein the database further includes a plurality of objects associated with current programming events (Fig. 36).

Referring to claims **36** and **39**, Hoarty discloses the system/computer-implemented method of claims 1 and 12, respectively, wherein the assignment of the 3-D EPG world is determined on the basis of user's preferences (user choice)(col. 18, l. 63-67 & col. 19, l. 1-18).

Referring to claims **37** and **40**, Hoarty discloses the system/computer-implemented method of claims 1 and 12, respectively, wherein the assignment of the 3-D EPG world is determined based on a programmer selection (user choice)(col. 18, l. 63-67 & col. 19, l. 1-18).

Referring to claim **41**, Hoarty discloses the system of claim 1, wherein the layout of the presented virtual world is comprised of environmental portions that do not include programming information (Figs. 35-41).

Referring to claim **42**, Hoarty discloses the system of claim 1, wherein the plurality of 3-D EPG worlds includes a first world having a first layout, and a second world, having a second layout that is different from the first layout (Figs. 35-41).

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Referring to claims **43**, **47**, and **48**, Hoarty discloses the system/computer-implemented method/machine-readable medium of claims 1, 12, and 23, respectively, wherein the database further includes localized interactive content, and the first unit is configured to generate the 3-D EPG based on localized interactive content (col. 5, l. 30-32; col. 18, l. 63-67; & col. 19, l. 1-18).

Referring to claim **44**, Hoarty discloses the system of claim 43, further including a user interface configured to allow a user to interact with the localized interactive content (Figs. 35-41).

Referring to claim **45**, Hoarty discloses the system of claim 43, wherein the database is configured to store localized interactive content in real-time (col. 8, l. 40-49).

Referring to claim **46**, Hoarty discloses the system of claim 1, wherein the database further includes electronic commerce objects, and the first unit is configured to generate the 3-D EPG based on electronic commerce objects (Fig. 35).

Referring to claim **50**, Hoarty discloses the system of claim 1, wherein selecting the 3-D EPG world based on the assignment is in response to an interaction with the 3-D EPG (user choice)(col. 18, l. 63-67 & col. 19, l. 1-18).

Referring to claim **51**, Hoarty discloses the system of claim 1, wherein determining the assignment includes:

- displaying information related to one or more candidate 3-D EPG worlds to a user, the 3-D EPG world being one of the candidate 3-D EPG worlds (Figs. 35-41), and
- receiving information that represents a selection of the 3-D EPG world from the one or more candidate 3-D EPG words by the user (user choice)(col. 18, l. 63-67 & col. 19, l. 1-18).

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Referring to claim **52**, Hoarty discloses the system of claim 1, further comprising determining for a second time, the assignment to the EPG of the 3-D EPG world, wherein the assignment is modified (user selection)(col. 18, l. 63-67 & col. 19, l. 1-18).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims **35, 38, 49** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoarty in view of Rowe et al. (of record).

Referring to claims **35, 38, and 49**, Hoarty discloses the system/computer-implemented method of claims 1, 12, and 36, respectively. Hoarty further discloses allowing a user to search TV programming by subject (Fig. 37). Hoarty does not specifically disclose that the assignment of the 3-D EPG world is determined on the basis of a user's age. Rowe et al. discloses searching television programming by children's content (col. 11, l. 22). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the TV subject searching of Hoarty to include searching by children's content, such as that taught by Rowe et al. in order to simplify the process of selecting programs of interest for each audience member (Rowe et al. col. 2, l. 14-16).

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Van Handel/
Examiner, Art Unit 2424

5/24/2010